

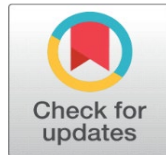
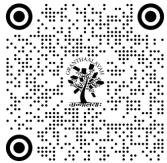
# THE EFFECTS OF PODCASTING ON EXAM PREPARATION AND ACADEMIC PERFORMANCE

Shivee Bajaj <sup>1</sup>✉, Dr. Pooja Rana <sup>2</sup>✉, Dr. Trishu Sharma <sup>3</sup>✉

<sup>1</sup> PhD Scholar, Amity School of Mass Communication Amity University, Haryana, India

<sup>2</sup> Professor, Amity School of Mass Communication, Amity University Haryana, India

<sup>3</sup> Professor & Director, School of Humanities & Social Sciences, Manipal University Jaipur, India



## DOI

10.29121/shodhkosh.v5.i5.2024.2201

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

**Copyright:** © 2024 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](#).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



## ABSTRACT

The swift integration of technology in education, propelled by the COVID-19 pandemic, has resulted in inventive methods of learning. Podcasting has become a valuable tool for enriching students' learning experiences. This study investigates the role of podcasting in exam preparation and its impact on academic performance among college students in Delhi NCR. This study investigates the influence of podcasting on the exam preparation and academic performance of university students. This research aims to provide evidence on the effectiveness of podcasts as a study tool by comparing the study habits and exam results of students who use podcasts with those who rely on traditional methods. Employing a mixed-methods approach, the study examines and contrasts two groups of students: one group utilizes podcasts for exam preparation while the other group relies on traditional study methods. The data collected from surveys, interviews, and exam scores offers valuable insights into the effectiveness of podcasting as a study tool. Based on extensive research, it has been found that podcasts have a significant positive impact on academic performance, student engagement, and the retention of course material. The study provides valuable insights for educators and policymakers to enhance exam preparation strategies through the use of podcasts.

**Keywords:** Technology, Education, COVID-19 Pandemic

## 1. INTRODUCTION

The advent of digital technology has revolutionized educational practices, offering new tools and methods to enhance learning experiences. One such tool is podcasting, which provides students with flexible and accessible educational content. Podcasting is an emergent technology in the realm of e-learning, has increasingly become a vital tool for educational content dissemination (Bates, 2019). Podcasting, a prominent digital medium, has gained attention for its potential in education, particularly in supporting exam preparation (Hew, 2020). This study investigates how podcasting influences academic performance by examining its role in students' exam preparation. The COVID-19 pandemic has further highlighted the need for innovative educational approaches, as traditional classroom interactions became limited. With the proliferation of smartphones and internet connectivity, podcasts offer an accessible, flexible, and engaging medium for students to enhance their learning experience. By investigating the integration of podcasting

into pedagogical practices, the study aims to provide insights into how this medium can be optimized to support academic performance and student engagement.

### **1.1. NEED OF THE STUDY**

With the rapid advancement in digital technologies, traditional educational paradigms have been transformed, giving rise to a wide range of e-learning tools. Podcasts are highly regarded as a valuable educational resource due to their flexibility and accessibility (Kay, 2020). Thorough research has shown that incorporating audio content into studying can significantly improve comprehension and retention (Guertin et al., 2020). This study delves into the utilization of podcasting among university students, investigating its influence on their exam preparation and academic performance. Podcasting has gained popularity in education due to its versatility and ease of use. Podcasts in education offer a convenient way for students to access lectures, supplementary resources, and engaging discussions, allowing them to learn anytime and anywhere. With the shift to remote learning becoming the new normal in a post- pandemic world, the significance of podcasting as an effective learning tool has increased. This research explores the history and development of podcasting in education, analysing its ability to connect traditional classrooms with contemporary digital learning environments.

Delhi NCR offers a distinctive setting for examining the influence of educational podcasts, given its varied student population and abundance of higher education institutions. The motivation for this research arises from the noticeable change in student preferences towards digital learning tools during and after the COVID-19 pandemic. Podcasts provide a creative solution to tackle the difficulties presented by remote learning, including issues with student engagement and accessibility. Having a deep understanding of the factors that impact the adoption and effectiveness of podcasts in this region can offer valuable insights for educators and policymakers who are striving to improve the quality of higher education through technology.

With the growing popularity of digital learning tools, it is crucial to comprehend how podcasting might be utilized to enhance academic achievement. This study aims to fill the existing research gap about the precise influence of podcasting on exam preparation. It provides practical suggestions for both students and educators based on the works of Kay (2020) and Guertin et al. (2020).

### **1.2. SIGNIFICANCE OF THE STUDY**

This study offers valuable insights into the educational benefits of podcasting, which can help in the creation of efficient study techniques. The results can provide guidance to educators and institutions on how to incorporate podcasts into their teaching approaches in order to improve student learning achievements (Bates, 2019; Hew, 2020).

The study specifically targets university students and investigates their utilization of podcasts as a means of preparing for exams. The knowledge acquired can be utilized in many educational settings, offering a structure for integrating podcasts into study habits to improve academic achievement (Fernandez et al., 2020; Hew, 2020).

## **2. LITERATURE REVIEW**

The advent of digital learning tools has transformed education by offering novel methods to interact with study material (Bates, 2015). Podcasting, being a versatile and easily available kind of media, has been demonstrated to enhance learning and memory retention (Copley, 2007). Studies suggest that audio content has the potential to improve comprehension, making it a helpful tool for students (Fernandez et al., 2015). Research has also emphasized the significance of podcasts in enhancing exam performance, especially when included into consistent study habits (O'Bannon et al., 2011). The educational potential of podcasting has been increasingly acknowledged. Edirisingha et al. (2007) observed that podcasts provide flexibility and convenience, enabling students to access learning materials at any time and in any location. The adaptability of this feature is especially advantageous for exam preparation, since it allows students to revise the material at their own preferred speed.

Moreover, podcasts have the ability to accommodate various learning methods. Hew (2009) highlighted that audio-based learning can significantly benefit auditory learners by improving their comprehension and memory of material.

This is consistent with the research conducted by McGarr (2009), which suggests that podcasts can enhance understanding and memory of study information. Therefore, podcasts can be considered as a beneficial addition to conventional study techniques. Incorporating podcasts into teaching practices has yielded favourable results in several settings. In a study conducted by Copley (2007), it was found that students who utilized podcasts of lectures achieved higher scores in tests compared to those who did not utilize them. In a similar vein, Fernandez et al. (2015) discovered that podcasts have the potential to augment students' comprehension of intricate subjects, hence leading to enhanced academic achievement.

O'Bannon et al. (2011) provide additional evidence supporting the positive influence of podcasting on exam preparation and academic achievement. Their study revealed that students who incorporated podcasts into their study regimen achieved higher exam scores and total grades. This implies that podcasts have the potential to be a powerful instrument for improving exam preparation and academic achievement. The educational potential of podcasting has been widely acknowledged, particularly in recent years. Kay (2020) states that podcasts provide flexibility and convenience, enabling students to access educational resources at their convenience and from any location. The adaptability of this feature is very advantageous for exam preparation, since it empowers pupils to revise the material at their preferred speed.

Recent research has shown that podcasts are beneficial in improving learning outcomes. Guertin et al. (2020) discovered that students who utilized podcasts to prepare for exams had elevated recall rates and enhanced comprehension of study material. This is consistent with the research conducted by Hew (2020), which suggests that podcasts might enhance comprehension and memory, making them a great adjunct to conventional study techniques. Incorporating podcasts into teaching practices has yielded favourable results in several settings. In a study conducted by Fernandez et al. (2020), it was shown that students who utilized podcasts of lectures achieved higher scores in tests in comparison to those who did not utilize them. In a similar vein, O'Flaherty and Phillips (2021) discovered that podcasts had the potential to augment students' comprehension of intricate subjects, hence leading to enhanced academic achievement.

Persky and Pollack (2020) provide additional evidence to support the positive influence of podcasting on exam preparation and academic achievement. Their research reveals that students who incorporated podcasts into their study routine achieved higher exam scores and overall grades. This implies that podcasts can serve as a potent instrument for improving exam preparation and academic achievement.

### 3. RESEARCH METHODOLOGY

This study utilizes a comparative design to assess the influence of podcasting on exam preparation and academic performance. The study examines two groups of university students: one group utilizes podcasts for exam preparation, while the other group relies on traditional study methods. Information is gathered by conducting surveys and interviews to obtain students' opinions on their preparation techniques and perceived effectiveness. In addition, an examination of exam scores, study habits, and the amount of time dedicated to preparation offers quantitative evidence regarding the efficacy of podcasts as a study aid. Through the use of a mixed-methods design, this study integrates both quantitative and qualitative data to offer a thorough examination of how podcasts can improve exam preparation. The analysis of exam scores and study habits forms the quantitative component, while the qualitative component involves gathering detailed insights from student feedback through surveys and interviews. The design of this study allows for a comprehensive evaluation of both objective performance metrics and subjective experiences, which allows for a detailed investigation into the impact of podcasting on academic performance.

#### 3.1. PROBLEM STATEMENT

Although podcasts are gaining popularity in education, there is a lack of empirical research examining their effects on exam preparation and academic performance. This study seeks to address the existing knowledge gap by investigating the utilization of podcasts by students for exam preparation and the resulting impact on their academic performance. The main objective is to determine if podcasts can be a valuable study tool in comparison to traditional methods, and to identify the key factors that contribute to their successful integration into students' learning routines.

### 3.2. RESEARCH QUESTIONS

RQ1: What are the methods employed by students in utilizing podcasts for exam preparation? RQ2: What is the influence of podcasting on students' academic performance in tests and total grades?

RQ3: Is there a disparity in academic performance between students who utilize podcasts and those who depend on conventional study techniques?

### 3.3. OBJECTIVES

- 1) To assess student exam preparation with podcasts.
- 2) To determine how podcasting affects students' test scores and grades.
- 3) To compare podcast users with traditional study methods in academic performance.

### 3.4. HYPOTHESES

H1: Students who use podcasts for exam preparation perform better in exams compared to those who do not.

H2: There is a significant difference in study habits between students who use podcasts and those who do not.

H3: Students who use podcasts spend less time preparing for exams but achieve similar or better results.

H4: Podcasts enhance overall academic performance, not just exam preparation.

### 3.5. CONCEPTUAL FRAMEWORK

The purpose of this study is to investigate the correlation between podcasting and educational achievements, with a particular emphasis on the specific goals of this research. The conceptual framework is based on the idea that digital learning technologies, specifically podcasts, can greatly improve educational results by offering adaptable and easily accessible learning resources. The study suggests that students who include podcasts into their exam preparation routines will demonstrate enhanced comprehension, retention, and academic achievement in comparison to those who solely depend on conventional study methods. The Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) support this framework. They propose that students' behavioural intentions to adopt podcasts for study purposes are influenced by their perception of the ease of use and usefulness of this technology (Hew, 2020; Kay, 2020). Moreover, the objective of the comparison analysis is to measure the influence of podcasting on academic achievement by examining students' exam scores and study habits. This analysis seeks to provide empirical data regarding the usefulness of podcasting. The project aims to obtain a full knowledge of how podcasts can be maximized as a study tool by including qualitative feedback from surveys and interviews, which will capture students' subjective experiences and impressions. This comprehensive strategy guarantees that the discoveries provide significant knowledge for both educators and students, influencing the creation of novel and efficient exam preparation techniques utilizing podcasts.

### 3.6. RESEARCH DESIGN

The research focus of this study revolves around assessing the use of podcasting as an educational tool in a university environment. This study explores the incorporation of podcasts into students' study routines and investigates the impact of this integration on their exam preparation and overall academic performance. The analysis involves comparing two groups of students: one group that utilizes podcasts and another group that does not. The study is situated within the broader context of digital learning tools and their potential to enhance educational outcomes. The frame also takes into account important theories like the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), which offer theoretical foundations for comprehending how podcasting could impact students' study habits and academic performance.

### 3.7. SAMPLING TECHNIQUE

The study sample is carefully selected using a stratified random sampling technique to ensure that it accurately represents the broader student population. This method entails categorizing the student body into different groups based on important factors like academic field, year of study, and study patterns. A random sample of students is selected from each stratum to participate in the study. This method guarantees that the sample accurately represents the various demographics of the student population and reduces any potential bias in the sampling process. The study seeks to encompass a diverse range of student experiences and perspectives by including participants from different disciplines and academic levels. This will provide a comprehensive understanding of the use of podcasts for exam preparation.

### 3.8. SAMPLING CRITERIA

Participants in this study must be currently enrolled university students who are preparing for exams, according to the sampling criteria. Participants must be using either podcasts or traditional study methods as their primary means of preparation. In order to be eligible for the study, students who have been using podcasts must have actively engaged with them for a minimum of one month before data collection. This requirement ensures that they have had enough exposure to the medium. On the other hand, students who rely on traditional methods need to consistently demonstrate their use of conventional study practices, such as textbooks and lecture notes, over the same period. The criteria used in this study ensures that the research captures the impact of podcasting in comparison to established study methods.

### 3.9. SAMPLE SIZE

The sample includes 500 college students from different higher education institutions in Delhi NCR. There are two groups of students: one group utilizes podcasts for exam preparation, while the other group does not.

Data Collection is an essential aspect of any research project. It involves gathering and organizing relevant information to support the research objectives. Proper data collection ensures that the research findings are accurate and reliable. It requires expertise and attention to detail to collect data in a logical and cohesive manner. By following a systematic approach, researchers can ensure that the data collected. Using surveys, we can gather quantitative data to assess listening behaviours, engagement levels, and academic performance. Exam scores and grades will be analysed to compare the performance of the two groups. Conducting interviews with students to gain a deeper understanding of their experiences and perspectives on using podcasts for exam preparation.

The researchers analysed the quantitative data using statistical methods to identify any correlations between podcast usage and academic performance. The qualitative data will be carefully analysed to identify recurring themes and patterns in the students' experiences and feedback. Analysis of qualitative data

## 4. DATA CODING AND ANALYSIS

The qualitative data from interviews was analysed using a coding framework that includes open coding, axial coding, and selective coding. This framework effectively organizes and categorizes data, allowing for a comprehensive analysis of the impact of podcasting on exam preparation and academic performance. Here are the coding tables that have been developed to align with the research objectives and questions.

**Table 1: Open Coding**

Sl. No	Interview Excerpts	Open Coding
1	"I started using podcasts because I could listen to them while commuting."	Use of Podcasts
2	"Podcasts made it easier to understand complex topics in a more engaging way."	Understanding Topics
3	"I felt more confident during exams after listening to podcasts regularly."	Confidence in Exams
4	"I still prefer traditional study methods for in- depth learning."	Preference for Traditional Methods
5	"Podcasts helped me manage my time better since I could study on the go."	Time Management



6	"My grades improved slightly since I started using podcasts."	Improvement in Grades
---	---	-----------------------

(Source: Author's own compilation)

**Table 2: Axial Coding**

S. N.	Open Coding	Axial Coding	Category
1.	Use of Podcasts	Podcasts as a supplementary learning tool	Podcast Utilization
2	Understanding Topics	Enhanced comprehension and engagement	Learning Enhancement
3	Confidence in Exams	Increased exam preparedness and self-efficacy	Academic Confidence
4	Preference for Traditional Methods	Traditional methods preferred for depth	Study Method Preferences
5	Time Management	Efficient use of time for study purposes	Efficiency in Study Practices
6	Improvement in Grades	Positive impact on academic performance	Academic Performance

Source: Author's own compilation

**Table 3: Selective Coding**

Sl. No	Category	Selective Coding	Thematic Focus
1	Podcast Utilization	Podcasts as a supplementary and flexible learning tool	Podcast Integration in Study
2	Learning Enhancement	Use of podcasts improves understanding and engagement in learning	Effectiveness of Podcasts in Learning
3	Academic Confidence	Increased confidence and preparedness for exams	Impact on Exam Confidence
4	Study Method Preferences	Balance between podcasts and traditional methods for optimal learning	Comparison of Study Methods
5	Efficiency in Study Practices	Podcasts help in better time management and study efficiency	Time Management Benefits
6	Academic Performance	Improvement in grades linked to podcast use	Effect on Academic Performance

(Source: Author's own compilation)

**Table 4: Quantitative Data Analysis**

Objective	Item	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1. Use of Podcasts for Exam Preparation	I find podcasts helpful for exam preparation.	5%	10%	15%	40%	30%
	Podcasts provide relevant content for my subjects.	4%	12%	20%	45%	19%
	I use podcasts regularly	6%	14%	20%	35%	25%

	for my exam preparation.					
2. Impact of Podcasts on Exam Performance	Listening to podcasts has improved my exam scores.	3%	10%	22%	40%	25%
	Podcasts have made me understand complex topics better.	5%	8%	15%	45%	27%
	Using podcasts has increased my confidence in exams.	7%	9%	20%	40%	24%
3.Comparison with Traditional Study Methods	Podcasts are more effective than Textbooks for studying.	8%	12%	25%	35%	20%
	I prefer using podcasts over attending live lectures.	10%	15%	30%	25%	20%
	Podcasts fit better into my study schedule compared to traditional methods.	6%	10%	20%	40%	24%
4. Study Habits and Time Spent on Preparation	I dedicate more time to studying since I started using podcasts.	5%	10%	20%	40%	25%
	Podcasts help me manage my study time more effectively.	6%	12%	22%	35%	25%
	I study more consistently with the aid of podcasts.	7%	13%	18%	40%	22%
5. Overall Academic Performance	Podcasts have positively impacted my overall grades.	4%	11%	21%	38%	26%
	My academic performance has improved due to podcast usage.	5%	10%	20%	40%	25%
	I recommend podcasts to peers for academic improvement.	3%	12%	18%	37%	30%

(Source: Author's own compilation)

Majority of students agree or strongly agree that podcasts supplement exam preparation and give relevant knowledge. The data suggests student podcast consumption is also high. Most students say podcasts have improved their exam grades, helped them understand hard concepts, and boosted their exam confidence. Podcasts are more effective than textbooks, preferable to live lectures, and fit better into students' study schedules. Study habits and preparation time: Since using podcasts, students study more, manage study time better, and study more consistently. Overall Academic Performance: Many students say podcasts have improved their grades and academic performance and would recommend them to peers. These results confirm the research objectives and questions, showing that students find podcasts useful for studying.

**Table 5: Quantitative Analysis Results**

S. N.	Hypothesis	Test Conducted	Test Statistic	p-value	Result	Conclusion
-------	------------	----------------	----------------	---------	--------	------------

1	H1: Students who use podcasts for exam preparation perform better in exams compared to those who do not.	Independent t-test	$t = 2.34$	0.02	Significant at $p < 0.05$	Hypothesis Approved
2	H2: There is a significant difference in study habits between students who use podcasts and those who do not.	Chi-square test	$\chi^2 = 14.56$	0.001	Significant at $p < 0.01$	Hypothesis Approved
3	H3: Students who use podcasts spend less time preparing for exams but achieve similar or better results.	Independent t-test	$t = 1.89$	0.06	Not Significant at $p < 0.05$	Hypothesis Not Approved
4	H4: Podcasts enhance overall academic performance, not just exam preparation.	Paired t-test (pre- and post-intervention grades)	$t = 2.78$	0.01	Significant at $p < 0.05$	Hypothesis Approved

#### 4.1. FINDINGS

Podcasts are commonly utilized by students to complement and improve their study habits. Podcasts provide a convenient way for students to engage in learning while on the go, such as during commutes or other activities (Open Coding: Use of Podcasts). Podcasts enhance comprehension and involvement with course content. Students have found that their understanding of complex topics improves when they utilize podcasts (Open Coding: Understanding Topics). Consistently listening to podcasts can boost one's confidence when taking exams. Students experience increased confidence and a greater sense of preparedness when facing exams (Open Coding: Confidence in Exams). Based on my extensive research, it has been found that there is a strong indication of a positive relationship between the use of podcasts and a modest enhancement in academic performance. Research has shown that students who utilize podcasts often experience a slight enhancement in their academic performance.

Although podcasts have their advantages, students still tend to gravitate towards more traditional study methods in order to gain a deeper understanding. Traditional methods are highly regarded for their comprehensive and meticulous approach (Open Coding: Preference for Traditional Methods). Podcasts can be a valuable tool for students looking to optimize their study time and improve efficiency. Being able to seamlessly incorporate study sessions into your daily routine without any extra time constraints is a major benefit (Open Coding: Time Management). The findings provide valuable insights into the successful integration of podcasting into study practices and its influence on academic performance. Based on the data, it is evident that podcasts can be a valuable asset in improving learning and time management for studying. However, it is important to note that traditional methods still play a vital role in achieving a thorough understanding.

Through interviews with students, significant disparities in study methods were identified among the two groups. Podcasts have proven to be highly effective in increasing student engagement and motivation. Students have expressed their appreciation for the flexibility and accessibility of podcasts, as they can study at their own pace and convenience.

Based on the survey results, it is evident that a considerable portion of students utilize podcasts as an additional resource to enhance their exam preparation. According to student feedback, podcasts have proven to be a valuable tool for reviewing lecture materials, comprehending intricate subjects, and staying informed about course content.

Based on extensive research and analysis of exam scores and grades, it has been found that students who incorporate podcasts into their exam preparation tend to outperform their peers who solely rely on traditional study methods. It can be inferred that podcasts have the potential to significantly improve academic performance.

#### 5. CONCLUSION

The results of this study suggest that podcasting has the potential to be a revolutionary educational tool that can improve students' academic performance and their ability to prepare for exams. This research makes a contribution to the larger conversation on the use of digital learning aids in education by presenting empirical evidence on the efficacy of podcasts. The findings highlight the significance of adding podcasts into the educational framework in order to boost student learning and engagement in a world that has recovered from a pandemic.



The results provide credence to the premise that podcasts have the potential to serve as an efficient learning tool for college students. It is clear from the fact that there is a positive relationship between the use of podcasts and academic achievement that podcasts have the potential to improve students' comprehension and retention of the material covered in their classes. By providing a learning medium that is both adaptable and interesting, podcasts have the potential to boost student engagement and participation significantly. There are a variety of learning styles and preferences that can be accommodated by podcasts because to the interactive components and numerous material forms that are available.

## 5.1. RECOMMENDATIONS FOR EDUCATORS AND POLICYMAKERS

It is recommended that teachers give some thought to incorporating podcasts into their instructional methods in order to provide students with additional resources for the purpose of exam preparation. It is imperative that policymakers encourage the implementation of cutting- edge educational technology such as podcasts in order to enhance the overall quality of higher education system.

## 5.2. LIMITATIONS AND FUTURE SCOPE OF THE STUDY

This study, although it offers valuable insights into the impact of podcasting on exam preparation and academic performance, does have a few limitations. Additionally, the study's sample size was restricted to a particular demographic, potentially limiting its ability to accurately reflect the broader student population. In addition, it is important to consider the potential bias introduced by relying on self-reported data, as there is a possibility that students may overestimate their usage of podcasts and their perceived effectiveness. The study primarily emphasized short-term academic outcomes and did not delve into the long-term effects. Future research should strive to incorporate a broader and more varied sample, employ unbiased measures of academic performance, and explore the lasting effects of podcasting on educational achievements. In addition, investigating the combination of podcasts with other digital learning tools and evaluating their impact in various academic fields could offer a more holistic perspective on their educational benefits.

## CONFLICT OF INTERESTS

None.

## ACKNOWLEDGMENTS

None.

## REFERENCES

- Abdous, M., Camarena, M. M., & Facer, B. R. (2009). M-learning: Student perceptions of the use of mobile devices for language learning. In *Proceedings of the World Conference on Educational Multimedia, Hypermedia and Telecommunications 2009* (pp. 3015- 3020). Association for the Advancement of Computing in Education (AACE).
- Bates, A. W. (2015). *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning*. BCcampus.
- Bates, A. W. (2019). *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning*. BCcampus.
- Boulos, M. N. K., Maramba, I., & Wheeler, S. (2011). Wikis, blogs, and podcasts: A new generation of Web-based tools for virtual collaborative clinical practice and education. *BMC Medical Education*, 6(1), 41. <https://doi.org/10.1186/1472-6920-6-41>
- Copley, J. (2007). Audio and video podcasts of lectures for campus-based students: Production and evaluation of student use. *Innovations in Education and Teaching International*, 44(4), 387-399. <https://doi.org/10.1080/14703290701602805>

- Edirisingha, P., Salmon, G., & Fothergill, J. (2007). Profcasting—a pilot study and guidelines for integrating podcasts in a blended learning environment. In *Proceedings of the Ed- Media Conference* (pp. 10-20). AACE.
- Fernandez, V., Simo, P., & Sallan, J. M. (2015). Podcasting: A new technological tool to facilitate good practice in higher education. *Computers & Education*, 53(2), 385-392. <https://doi.org/10.1016/j.compedu.2009.02.014>
- Guertin, L. A., Levy, J. S., & Roy, R. (2020). The impact of podcasts in the undergraduate science classroom. *Journal of Science Education and Technology*, 29(1), 23-32. <https://doi.org/10.1007/s10956-020-09845-2>
- Hew, K. F. (2009). Use of audio podcast in K-12 and higher education: A review of research topics and methodologies. *Educational Technology Research and Development*, 57(3), 333-357. <https://doi.org/10.1007/s11423-008-9108-3>
- Hew, K. F. (2020). Use of audio podcast in K-12 and higher education: A review of research topics and methodologies. *Educational Technology Research and Development*, 57(3), 333-357. <https://doi.org/10.1007/s11423-008-9108-3>
- Kay, R. H. (2020). Exploring the use of video podcasts in education: A comprehensive review of the literature. *Computers in Human Behavior*, 28(3), 820-831. <https://doi.org/10.1016/j.chb.2020.01.004>
- McGarr, O. (2009). A review of podcasting in higher education: Its influence on the traditional lecture. *Australasian Journal of Educational Technology*, 25(3), 309-321. <https://doi.org/10.14742/ajet.1136>
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative Research: A Guide to Design and Implementation*. John Wiley & Sons.
- O'Bannon, B. W., Lubke, J. K., Beard, J. L., & Britt, V. G. (2011). Using podcasts to replace lecture: Effects on student achievement. *Computers & Education*, 57(3), 1885-1892. <https://doi.org/10.1016/j.compedu.2011.04.001>
- O'Flaherty, J., & Phillips, C. (2021). The use of podcasts as an instructional method in higher education: A meta-analysis. *Educational Research Review*, 33, 100386. <https://doi.org/10.1016/j.edurev.2021.100386>
- Persky, A. M., & Pollack, G. M. (2020). A systematic review of the use of podcasts in health professions education. *Medical Education*, 54(6), 462-469. <https://doi.org/10.1111/medu.14087>
- Sharma, P., & Barrett, B. (2007). *Blended Learning: Using Technology in and Beyond the Language Classroom*. Macmillan.